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CLAIMS

1. A communications network for transferring data in accordance with a transfer priority number, the network having a number of switching nodes which transfer data transmitted between end stations coupled to the network, each switching node comprising:

a store for storing data prior to transfer;

a monitor for monitoring the volume of data being transferred through the switching node;

a comparator for comparing the volume of data to a predetermined threshold; and,

a signal generator for generating a congestion signal if the respective volume of traffic exceeds the predetermined threshold, wherein the adjacent switching nodes and/or end stations are responsive to the congestion signal to temporarily store at least some of the data to be transferred via the respective switching node, the data for storage being selected in accordance with the priority number.

2. A communications network according to claim 1, wherein the signal generator is adapted to generate an end-of-congestion signal when the respective volume of traffic falls below a second predetermined threshold, the adjacent switching nodes being responsive to the end-of-congestion signal to transfer the temporarily stored data, the data being accessed from the store in accordance with the priority number.

3. A communications network according to claim 2, wherein the second threshold corresponds to a lower volume of traffic than the first predetermined threshold.

4. A communications network according to claim 2, wherein the second threshold equals the first predetermined threshold.

5. A communications network according to any of the preceding claims, wherein the monitor monitors the amount of data stored in the store.

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6.   A communications network according to any of the
preceding claims, wherein the predetermined threshold
comprises a number of predetermined sub-thresholds, the
congestion signal including an indication of the sub-
5   threshold which has been exceeded, and wherein the data to
be temporarily stored is selected based on the sub-
threshold exceeded and the priority number.

7.   An end station for coupling to a communications
network which transfers data in accordance with a transfer
10   priority number, the communications network being adapted
to monitor the volume of data being transferred there
through and to generate a congestion signal if the
respective volume of traffic exceeds a predetermined
threshold, the end station comprising:

15   a store for storing data;
           an interface for coupling the end station to the
communications network; and,
           a processor responsive to the congestion signal to
cause the end station to temporarily store at least some of
20   the data to be transferred to the communications network,
the data for storage being selected in accordance with the
priority number.

8.   An end station according to claim 7, wherein the
communications network is adapted to generate an end-of-
25   congestion signal when the respective volume of traffic
falls below a second predetermined threshold, wherein the
processor is responsive to the end-of-congestion signal to
transfer the temporarily stored data, the data being
accessed from the store in accordance with the priority
30   number.

9.   An end station according to claim 7 or claim 8,
wherein the processor generates the data to be transferred.

10.   A method of transferring data via a communications
network in accordance with a transfer priority number, the
35   network having a number of switching nodes adapted to
transfer data transmitted between end stations coupled to
the network, the method comprising the steps of:

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causing each switching node to monitor the volume of data being transferred therethrough;

comparing the volume of data to a predetermined threshold;

causing a switching node to generate a congestion signal if the respective volume of traffic exceeds the predetermined threshold, wherein the adjacent switching nodes and/or end stations are responsive to the congestion signal to temporarily store at least some of the data to be transferred via the respective switching node, the data for storage being selected in accordance with the priority number.

11. A method according to claim 10, wherein the method further comprises generating an end-of-congestion signal when the respective volume of traffic falls below a second predetermined threshold, the adjacent switching nodes being responsive to the end-of-congestion signal to transfer the temporarily stored data, the data being accessed in accordance with the priority number.

12. A method according to claim 11, wherein the second threshold corresponds to a lower volume of traffic than the first predetermined threshold.

13. A method according to claim 11, wherein the second threshold equals the first predetermined threshold.

14. A method according to any of claims 10 to 13, wherein each switching node includes a store for temporarily storing data, and wherein the step of monitoring the volume of data being transferred through the switching node comprises monitoring the amount of data stored in the store.

15. A method according to any of the claims 10 to 14, wherein the predetermined threshold comprises a number of predetermined sub-thresholds, the congestion signal including an indication of the sub-threshold which has been exceeded, and wherein the data to be temporarily stored is selected based on the sub-threshold exceeded and the priority number.